

North Carolina Transmission Planning Collaborative

## Appendix D

Projects Investigated for Resource Supply Options Studied

December 6, 2007

Resource Supply Options – 2016 Hypothetical Import Scenarios Studied													
Imports to Progress East													
	Issue Identified	то	Lead	Duke 600 MW		Duke 1.200 MW		PJM 200 MW		SCPSA 400 MW		SCEG 600 MW	
Primary Alternative Investigated			Time (years)	Date Neede		Date Neede		Date Neede		Date Neede		Date Neede	
N/A	None.												

Resource Supply Options – 2016 Hypothetical Import Scenarios Studied Imports to Duke													
Primary Alternative Investigated	Issue Identified	то	Lead Time (years)	CPLE 100 MW Date Needed (\$M)		SOCO 600 MW Date Needed (\$M)		PJM 600 MW Date Needed (\$M)		TVA 600 MW Date Needed (\$M)		SCEG 600 MW Date Needed (\$M	
N/A	None.												

Resource Supply Options – 2016 Hypothetical Generation Scenarios Studied In Progress East <sup>1,2</sup>													
Primary Alternative Investigated	Issue Identified	то	Lead Time (years)	Scotland County 450 MW Date Needed (\$M)		Cumberland County 450 MW Date Needed (\$M)		450 MW		Johnston 450 M Date Neede	w	Robeson ( 600 M Date Neede	w
Construct Weatherspoon- Cumberland 230 kV line and Cumberland-Fayetteville East 230 kV line	Thermal loadings on Fayetteville- Fayetteville East 230 kV line and Weatherspoon Plant-Fayetteville DuPont 115 kV line	Progress	5									2016	65
Install 115 kV series reactor on Weatherspoon Plant-Fayetteville Dupont 115 kV line and Weatherspoon-Raeford 115 kV line	Thermal load on Weatherspoon-Raeford 115 kV line	Progress	4									2016	5
Install 115 kV series reactor at Weatherspoon on Wagram 115 kV terminal	Thermal loading on Raeford-Wagram 115 kV line	Progress	4	2016	2								

Resource Supply Options – 2016 Hypothetical Generation Scenarios Studied													
In Duke													
Primary Alternative Investigated	Issue Identified	то	Lead Time (years)	Guilford County 150 MW Date Needed (\$M)		Davidson County 150 MW Date Needed (\$M)		Union County 150 MW Date Needed (\$M)		Gaston County 150 MW Date Needed (\$M)		Rockingham County 800 MW Date Needed (\$N	
N/A	None.												

<sup>1</sup> The tables in Appendix D reflect the date the project is needed in order to implement the resource supply option studied.

<sup>2</sup> The estimated cost is in nominal dollars which reflects the sum of the estimated annual cash flows over the expected development period for the specific project (typically 2 – 5 years), including direct costs, loadings and overheads; but not including AFUDC. Each year's cash flow is escalated to the year of the expenditures. The sum of the expected cash flows is the estimated cost. Also, the projects required to accommodate each resource supply option were determined independently. Therefore, the projects and cost estimates do not reflect the requirements for simultaneously accommodating two or more resource supply options.